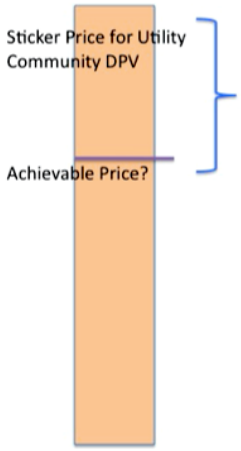
Abstract: What is the GAP Process, And How Does It Help to Maximize Strategic Solar Design Value?

What is the GAP Process?

Utility-led community solar programs often struggle with the economics of community-scale solar and the need for pricing that is both cost-based and competitive. While policymakers work to address fundamental changes to utility rate-design policies, program designers still need an internal process to help advance solar projects and programs today.

CSVP has worked with its advisory Forum to address this need. Its GAP process objectives include:

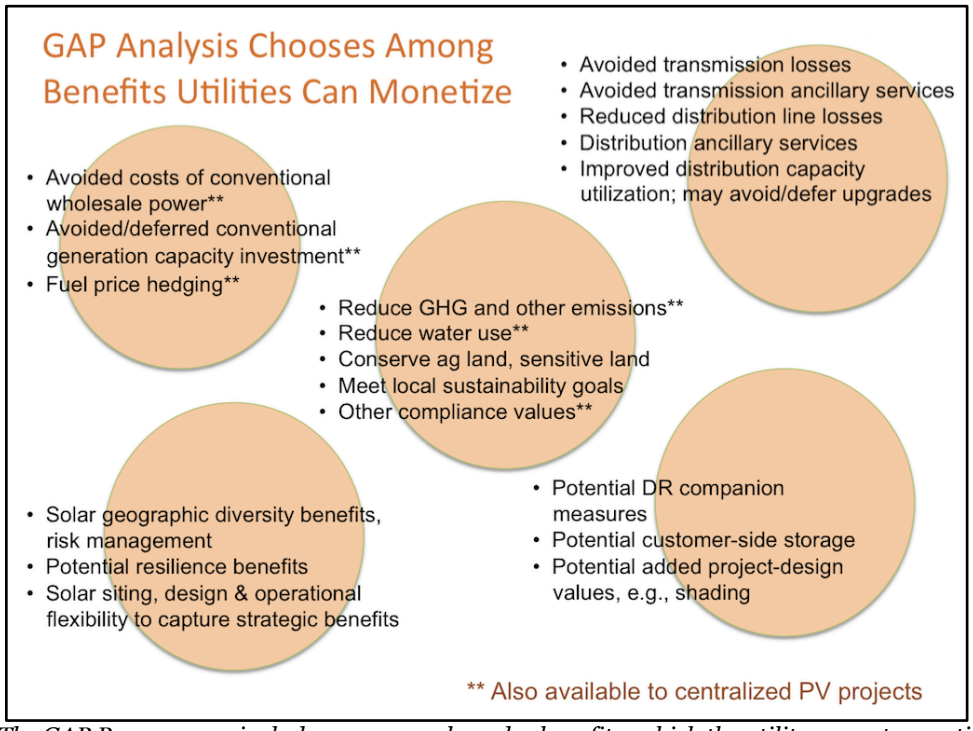
1. Basing the analysis on a program narrative, which concisely describes all the benefits of the procurement and the program;
2. Utilizing the analytic processes as a tool for decision-making, and not as an end in itself;
3. Encouraging the introduction of customized solar design elements that add strategic net value;
4. Including a rigorous solar- benefits analysis, narrowly focused on achieving the GAP pricing goal; and
5. Adapting familiar rate-design strategies for pricing the offer.



The GAP analysis is named for need to fill the gap between the baseline "sticker price" on a solar procurement and the net value that the utility can accept, in order to achieve competitive pricing on the program offer. The GAP analysis is a process to "Get A Price" that reflects strategic DER value, but conforms closely enough to utility norms that it can be achieved and accepted by decision-makers in a relatively short time.

How Does the GAP Process Help to Maximize Strategic Solar Design Value?

The GAP Analysis focuses on high-value DPV benefits that are both appropriate to the particular utility/situation, and sufficient to meet target costs. The GAP Analysis assumes a collaborative program-design process, involving different utility departments and key stakeholders, who first develop a narrative that reflects broad criteria for this solar program. (Find more on this in CSVP Process resources.) Some of the work to develop program criteria will come from an understanding of the community and prospective customers. Utility technical and economic parameters are also important, and as an aid, the GAP Analysis process provides a utility information questionnaire. There is a universe of potential benefits that utilities can monetize, and these are the focus of the GAP Analysis. However, the broader GAP Process and narrative development keeps non-monetizable benefits, ranging from economic development to local resilience options, front and center, too. The selection of design options for economic analysis will be influenced by the utility and community/stakeholder vision.



The GAP Process may include even more, broader benefits, which the utility cannot monetize through established means. However, even among this universe of monetizable benefits, there are many that have great strategic value, especially over the term (20 to 30 years) of the analysis. The question for solar project designers is, which combinations of solar siting, technical design and operations yield the greatest share of these strategic benefits?

Using these inputs, analysts who are familiar with strategic solar-design can develop a short list of likely strategic solar design options. Some examples include:

- Strategic Site Characteristics, including Site-Cost and Grid Value
- Fleet Siting to Take Advantage of Geographic Diversity of Multiple Projects
- Single-Axis Tracking Mount
- Optimized Orientation and Tilt Angle of Fixed-Tilt Mount or Carport
- Design Value or Resilience, Cost-Shared With Stakeholders
- Matching Cell Types to Geographic/Site Conditions
- Use of Smart Inverters
- Use of Storage or DR Companion Measures
- Supplemental Technology Strategies (e.g., EV charging)
- Financing and Business Model Strategies

A full-scale Value of Solar Analysis is still a standard for certain regulatory purposes, but it is seldom practical to apply in evaluating specific solar designs for their long-term, levelized-benefit impacts, and then modifying them to get the greatest possible results. By contrast, because the GAP Process is streamlined and aimed at a specific result, the design team can focus more on the design solutions that are likely to work for this utility, in this community, on this program timeline. For details, see http://www.CommunitySolarValueProject.com/assessment.html